

BURYKH, Ye.B.; KOLOBOV, Y.M.; SKOTNIKOV, Yu.A.; TIKHONOVICH, S.S.;  
SHMPOVALOV, T.I.; KONOVALOVA, K.A., redaktor; RODIONOV, Yu.,  
redaktor; LIL'YE, A., tekhnicheskii redaktor

[Memorable places in Moscow Province] Pamiatnye mesta Moskovskoi  
oblasti; kratkii putevoditel'. Izd. 2-o, dop. i perer. Sost. B.B.  
Burykh i dr. [Moskva] Moskovskii rabochii, 1956. 606 p. (MIRA 9:7)

1. Moscow. Oblastnoy krayevedcheskiy muzey. 2. Zamestitel' pred-  
sedatelya Moskovskogo oblastnogo obshchestva krayevedeniya (for  
Konovalova)

(Moscow Province--Historic houses, etc.)

BURYKH, Ye.B.; D'YAKONOV, M.V.; KOLOBOVA, M.I. [deceased]; KOLOBOV, V.M.;  
KONOVALOVA, K.A.; POPEDEYKIN, V.I.; SKOTNIKOV, Yu.A.; TIKHONOVICH,  
S.S.; SHEPOVALOV, T.I. Prinsipali uchastiye YUN'YEVA, N.P.;  
POLYAK, Ye.V.; SULTANOVA, N., red.; YAKOVLEVA, Ye., tekhn.red.

[Memorable places in Moscow Province; a concise guidebook] Pa-  
miatnye mesta Moskovskoi oblasti; kratkii putevoditel'. Izd.3.,  
dop. i perer. Sost.E.B.Burykh i dr. Moskva, Mosk.rabochii, 1960.  
734 p. (MIRA 14:2)

1. Moscow. Oblastnoy krayevedcheskiy muzey. 2. Zamestitel' predse-  
datelya Moskovskogo oblastnogo obshchestva krayevedeniya (for  
Konovalova).

(Moscow Province--Guidebooks)

KOLOBOV, V.N.

AFONIN, K.B.; BURTSSEV, K.I.; BYSTROV, S.N.; VINETS, G.B.; VODNEV, G.G.; VORONIN, A.S.; GEVLICH, A.S.; GRYAZNOV, N.S.; GUDIM, A.F.; GUSYATINSKIY, M.A.; DVORIN, S.S.; DIDENKO, V.Ye.; DMITRIYEV, M.M.; DONDE, M.M.; DROGOBIL, G.M.; ZHDANOV, G.I.; ZAGORUL'KO, A.I.; ZELENETSKIY, A.G.; IVASHCHENKO, Ya.Y.; KAPTAN, S.I.; KVASHA, A.S.; KIREYEV, A.D.; KLISHEVSKIY, G.S.; KOZYREV, V.P.; KOLOBOV, V.N.; LGALOV, K.I.; LEYTES, V.A.; LERNER, B.Z.; LOBODA, N.S.; LUBINETS, I.A.; MANDRYKIN, I.I.; MUSTAFIN, F.A.; NEMIROVSKIY, N.Kh.; NEFEDOV, V.A.; OBUKHOVSKIY, Ya.M.; PERETSEV, M.A.; PETROV, I.D.; PODOROZHANSKIY, M.O.; POPOV, A.P.; RAK, A.I.; REVIYAKIN, A.A.; ROZHKOV, A.P.; ROZENGAUZ, D.A.; SAZONOV, S.A.; SIGALOV, M.B.; STOMAKHIN, Ya.B.; TARASOV, S.A.; FILIPPOV, B.S.; FRIDMAN, N.K.; FRISHBERG, V.D.; KHAR'KOV-SKIY, K.V.; KHOLOPITSKY, V.P.; TSAREV, M.N.; TSOGLIN, M.B.; GHERNYI, I.I. CHERTOK, V.T.; SHELKOV, A.K.

Samuil Borisovich Banne. Keks i khim. no. 6:64 '56.

(MLRA 9:10)

(Banne, Samuil Borisovich, 1910-1956)

KOLOBOV, Ya.

Use of a water level in adjusting truck scales. Muk.-elev.  
prom. 21 no.4:10 Ap '55. (MIRA 8:7)

1. Kuybyshevskaya kontora Zagotzerno  
(Scales (Weighing instruments))

KOLOBOV, Ya.

Improve the quality of spare parts for grain testers. Muk.-elev. prom.  
21 no.5:30-31 My '55. (MIRA 8:9)

1. Knybyshevskaya kontora Zagotserno.  
(Grain elevators--Equipment and supplies)

KOLOBOV, Ya.

VORONTSOV, O., inzhener; KOLOBOV, Ya.

Location and installation of truck scales at the grain elevator.  
Muk.-elev.prom.21 no.8:28-29 J1[Ag] '55. (MIRA 8:12)

1. Vysshaya zagotovitel'naya shkola (for Vorontsov) 2. Kuybyshevskaya  
kontora Zagotserno (for Kolobov)  
(Scales (Weighing instruments))

KOLOBOV, Ya.

Improve the quality of A-25 truck scales. Muk.-elev.prom. 22  
no.10:29 0 '56. (MLBA 9:12)

1. Kuybyshevskaya oblastnaya kontora Zagotserno.  
(Scales (Weighing instruments))

KOLOBOV, Ya., inzh.

Using frames for laying truck scale foundations. Muk. elev. prom.  
23 no.12:13 D '57. (MIRA 11:2)

1. Kuybyshevskoye oblastnoye upravleniye khleboproduktov.  
(Foundations) (Scales (Weighing instruments))

KOLOBOV, Ya.

Defects in and the improvement of the performance and design  
of automatic scales. Mak.-elev.prom. 26 no.8:28-29  
Ag '60. (MIRA 13:8)

1. Kybyshevskoye oblastnoye upravleniye khleboproduktov.  
(Scales(Weighing instruments))

ALYAB'YEV, V.I.; KOLOBOV, Ye.A.; LEBEDEVA, V.V.; MASHIN, G.K.;  
NEKRASOV, R.M.; KARAVASHKIN, S.I., red.

[Cableways for partial aerial skidding and loading of  
tree-length logs in mountain felling areas] Trosovye  
ustanovki dlia polupodvesnoi trelevki i pogruzki khly-  
stov v gornyykh lesosekakh. Moskva, TSentr. nauchno-issl.  
in-t informatsii i tekhniko-ekon. issledovaniy po lesnoi  
tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl.  
i lesnomu khoziaistvu, 1963. 46 p. (MIRA 17:9)

53830

80223

S/076/60/034/04/03/042

B010/B009

AUTHOR: Kolobov, Ye. I. (Moscow)

TITLE: On the Structure of Crystalline Polymers

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 4, pp. 716-725

TEXT: In order to clarify the distribution character of the amorphous and oriented areas in a crystalline polymer the thermomechanical properties of such polymers were investigated in the isotropic and oriented states. Furthermore, the thermal elongations of polymer films with varying degrees of orientation were determined. The results obtained were interpreted in the light of the data of X-ray structural analyses found in the paper by Bunn and Alcock (Ref. 5). The elastic-static elongation of the polymer films was carried out on a dynamometric balance (Fig. 1). Polymers of different polarities were examined: of the apolar polymers-polyethylene, guttapercha, and Teflon; of the weakly polar ones- polychlorotrifluoroethylene, and the highly polar polymer-kapron. Comparative investigations were made on the amorphous polymers, polymethylmethacrylate and polystyrene. The thermal elongations in the direction of the crystal orientation were determined by means of a special device (Fig. 10) in

Card 1/2

KOLOBOV, Ye.I.

HXX Thermal elongation of polyethylene during "cold stretch forming". Plast.massy no.4:69-70 '62. (MIRA 15:4)  
(Polyethylene)

KOLOBOV, Ye.I.

Shrinkage of oriented polymers in the process of heating. Plast.-  
massy no.6:62-63 '62. (MIRA 15:6)

(Polymers)

KOLOBOV, Ye. M.

Kolobov, Ye. M. -- "Frost Resistance of Cement Used In Hydraulic Work."  
Cand Tech Sci, Moscow Chemicotechnological Inst, Moscow 1953. (Referativnyy  
Zhurnal--Khimiya, No 1, Jan 54)

So: SUM 168, 22 July 1954

KOLOBOV, YE. M.

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62361

Author: Butt, Yu. M., Kolobov, Ye. M.

Institution: None

Title: Dependence of Cement Contraction Upon Its Mineralogical Composition

Original

Periodical: Zh. prikl. khimii, 1956, 29, No 3, 468-470

Abstract: To establish a comparative qualitative contraction characteristic of the principal minerals of the clinker, tests were carried out with 4 cements prepared in the laboratory, each of which was characterized by predominance of some one mineral, and which approximated by their composition the single-mineral cements (alite, belite, aluminate, and aluminoferrite). For comparison were tested laboratory ground cements from clinker of "Gigant" and "Komsomolets" cement plants. The experiments showed that the flux-minerals exhibit a much greater contraction effect than the silicate-minerals. On

Card 1/2

KOLOBOV, YE. M.

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62360

Author: Butt, Yu. M., Kolobov, Ye. M.

Institution: None

Title: Surface Strength of Cement Stone and Its Use as Frost-Resistance  
Characteristic

Original

Periodical: Zh. prikl. khimii, 1956, 29, No 3, 470-473

Abstract: On determination of compression strength of cube specimens the stability of the entire structure of the specimen is tested since the load stress is taken up by the entire volume of the cube. Frost corrosion on the other hand affects first the corners then the edges and on the whole surface layers of all sides to a certain depth. Decrease in strength within these surface layers becomes distributed over the entire specimen which explains why evaluation of frost resistance from changes in compression strength is of

Card 1/2

Kolobov, E. M.

Shrinkage of cements as a function of its mineralogical  
composition. Yu. M. Butir and E. M. Kolobov. 1961  
Chem. U.S.S.R. 29, 809-11 (1968) (EPR) Translation  
- C.A. 50, 142015

10M

2

Kolobov, Ye. M.

Surface hardness of cements as a characteristic of freezing stability. Yu. M. But and E. M. Kolobov. 1961  
Chem. U.S.S.R. 29: 513-517  
See C.A. 50: 14301d

APR 1966-65 ARG/EWT(d)/FBO/EWT(1)/FBO/EEC(k)-2/ENG(s)-2/TCO/ENP(c)/EPR/  
 ASD-2/FCO(k)/EWA(h)/FS(b) Pn-4/Pq-4/PS-4/Pae-2/Pet/Pw-4  
 APSC/191 ASD(m)-3 JWA/TT/WW 5/5320/1/000/000/000/000/

1. Pankov, Yu. (Engineer); Pankov, Ye. (Engineer); Pankov, G. (Engineer)

2. "Rocket"

SOURCE: Rechanoy transport, no. 9, 1964, 30-33

TOPIC TAGS: ship, repair welding, ship repair / "Rocket-76" ship, "Rocket-1" ship,  
 "Rocket-11" ship, "Rocket-61" ship

... of repair of the ...  
 Rocket type motor ships are discussed. Damage to "Rocket-15", consisting of a  
 ... shown in Fig. 1 on the Enclosures, ...  
 ... of seating the sleeve ...  
 ... was used successfully for ...  
 ... sleeve on "Rocket-76" was repaired by removing part of the  
 support (as shown in Fig. 2 on the Enclosures) and welding ... sleeve ...  
 ... "Rocket-1" received ...

Card 4/4

I. 20966-65

ACCOMPLISHMENT NR: AP5001391

Rear support on "Rocket-1" required replacement of the whole support. The cheeks of the support were separated from the rear fin and, after thorough cleaning and careful alignment of the new rear support with the

rocket, the art. has: 8 figures.

in the "army" factory

ENCL: 02

REF CODE: IS, GO

NO REF SCV: 000

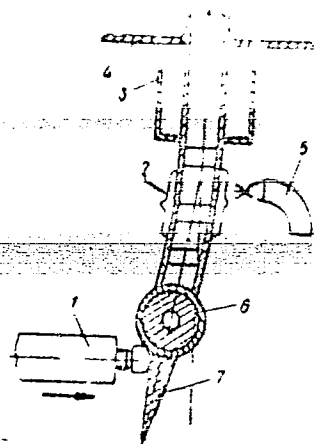
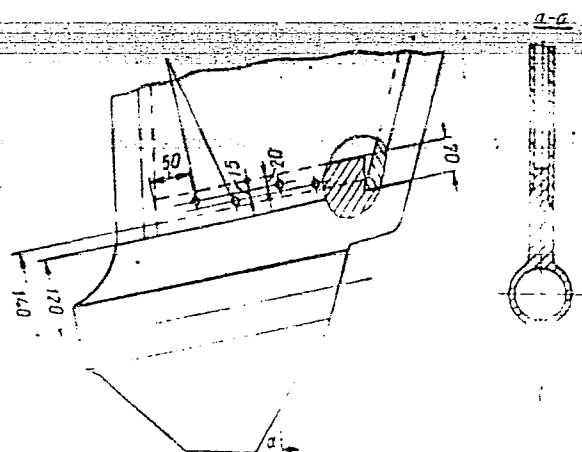


Fig. 1. Straightening of the rear support using heating and a screw-jack:  
1 - jack; 2 - heating zone; 3 - water coil; 4 - nut; 5 - pin plate;  
6 - cylindrical insert; 7 - fin.

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Support after repairs.

Card 1/1

YEVSTROPOV, Nikolay Alekseyevich; KOLOBOV, Yuriy Vasil'yevich;  
GRABILIN, Yu.N., otv. red.; PETRAKOVA, Ye.P., red.izd-va;  
BOLDYREVA, Z.A., tekhn. red.

[Some problems in short-delay blasting] Nekotorye voprosy korotko-  
zamedlennogo vzryvaniia. Moskva, Gosgortekhnizdat, 1962. 99 p.  
(MIRA 16:3)

(Blasting)

KOLOBOVA, A.N.

Quantitative fluctuations of the alfalfa bug [*Adelphocoris lineolatus* Goetz] in relation to changes in meteorological conditions. Zool.zhur. 32 no.3:449-456 My-Je '53. (MLBA 6:6)

1. Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta kormov imeni V.R. Vil'yamsa, (Poltava). (Alfalfa--Diseases and pests)

KOLOBOVA, A. N.

USSR/Special and General Zoology - Insects.

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69836

0-3

Author : Kolobova, A. N.

Inst :

Title : Brief Survey of Works on Entomology.

Orig Pub : Kiev, Gosset'khozisdat UkrSSR, 1956, 120-134

Abstract : No abstract.

Card 1/1

- 32 -

KOLOBOVA, A. N.

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823910010-7"

USSR / General and Specialized Zoology. Insects.  
Insect and Mite Pests.

P

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 44761

Author : Kolobova, A. N.

Inst : Not given

Title : The Entomological Pest Fauna of Perennial Grain Grasses in the Forest Steppe of the Ukraine.

Orig Pub : Vestn. s. kh. nauki, 1957, No. 1, 132-138

Abstract : Sixty species of insect pests were found on perennial grain grasses in 1945-1952, (42 of them damaged cereals). The Hessian and Swedish flies were the most dangerous pests to young stalk shoots and leaves. The Hessian fly seriously injured slender wheat grass (*Agropyrum tenerum*), (especially when planted with alfalfa), less often wheat grass and rarely harned meadow fescue.

Card 1/3

USSR / General and Specialized Zoology. Insects.  
Insect and Mite pests.

P

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 44761

The Swedish fly seriously injured wheat grass, less often quack grass and pasture ryegrass, and least of all fescue grass. *Meromyza saltatrix* L. and the flea beetle *Chaetocnema hortensis* Geoffr. wrought considerable damage. The stem moth (*Ochsochneimoria taurella* Sol.) and the grain mite, among the pests of the reproductive organs, damaged all species of grass in crop rotation; the grain cutworm moth damaged bromegrass and fescue, timothy thrips damaged 21.8 - 55.4% of the timothy seeds. The weevils *Sphenophorus striatopunctatus* and the spike flies of the genus *Amaurosoma* greatly damaged timothy grass. Injuries by the jumping plant lice (especially to couch grass and wheat grass), by the

Card 2/3

BATIASHVILI, I.D.; BEY-BIYENKO, G.Ye.; BOGDANOV-KAT'KOV, N.N.; GERASIMOV, B.A.; GILYAROV, M.S.; DMITRIYEV, G.V.; ZVEREZOMB-ZUBOVSKIY, Ye.V.; ZIMIN, L.S.; KOLOBOVA, A.N.; MEDVEDEV, S.I.; MISHCHENKO, A.I.; PETROV, A.I.; RYABOV, M.A.; SAVZDARG, E.N.; SELIVANOVA, S.N.; SKORIKOVA, O.A.; TROPKINA, M.P.; SHAPOSENIKOV, G.Kh.; SHCHEGOLEV, V.N., prof., doktor sel'skokhoz.nauk; ESTERBERG, L.K.; YAKHONTOV, V.V.; REUTSKAYA, O.Ye., red.; CHUMAYEVA, Z.V., tekhn.red.

[Classification of insects on the basis of damage to crops] Opre-  
delitel' nasekomykh po povrezhdeniyam kul'turnykh rastenii. Izd.4.  
perer. i dop. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 607 p.  
(Insects, Injurious and beneficial) (MIRA 14:1)

L 24123-66 EWT(d)/EWT(1)/EEC(k)-2/FCC/EWA(h) GW/WS-2

ACC NR: AP600667?

SOURCE CODE: UR/0203/66/006/001/0151/0153

AUTHOR: Kolobova, A. P.; Rapoport, Z. Ts.

ORG: Kol'skiy Branch, Polar Geophysics Institute, AN SSSR (Polyarnyy geofizicheskii institut, Kol'skogo filiala AN SSSR)

TITLE: Long-range propagation of ultrashort waves by ionospheric scattering in the subpolar zone and the state of ionosphere

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 1, 1966, 151-153

TOPIC TAGS: radio wave propagation, radio wave scattering, ionospheric scatter, radio transmitter, radio antenna, RC circuit, E layer, F layer

ABSTRACT: An experimental investigation of the long-range propagation of ultrashort radio waves by scattering in the ionosphere was conducted between Leningrad and Murmansk in 1962. The 30-kw transmitter was located in the Leningrad area with the receiving point at Murmansk. Rhombic antennas with radiation patterns in the vertical and horizontal planes of  $12-15^\circ$  at the half-power points were used. The angle of elevation above the horizon of maximum antenna directivity was  $8^\circ$ . The studies were conducted at 38.1 Mc. Changes in the level of received signals were smoothed out by an RC circuit with a time constant of approximately 4.4 sec. A vertical ionospheric probing station ( $f = 1.0-14.0$  Mc) was located near the midpoint of the path for correlating signal propagation with ionospheric conditions prevailing in the scattering

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UDC: 550.388.2

L 24123-66

ACC NR: AP6006672

region. Fig. 1 shows hourly variations of signal levels both at 38.1 Mc and at  $f_{min}$  (recorded at the ionospheric station) for 26 October 1962 (Moscow time).

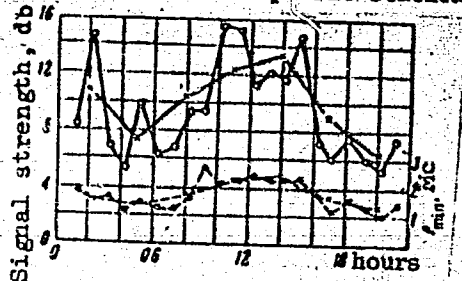


Fig. 1. Hourly variations in signal level at 38.1 Mc and  $f_{min}$  recorded on 26 October 1962 (Moscow time)

Cophasal variations in  $f_{min}$  and the signal level are attributed to an increase in the inhomogeneity of the D layer, which in turn is responsible for increased signal strength. Data obtained on 28-29 October 1962 (Moscow time) are plotted in Fig. 2. The solid curve represents variations in the signal level ( $f = 38.1$  Mc), the dots,  $f_{min}$ , and the circles,  $fE_s$ . The type and height of the  $E_s$  layer are included with each circle. Designation  $N^x$  signifies the absence of reflections at the ionospheric station due to unknown causes. The sporadic E layer was observed almost continuously during the two-day period. Variations in signal level failed to coincide with variations.

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L 24123-66  
ACC NR: AP6006672

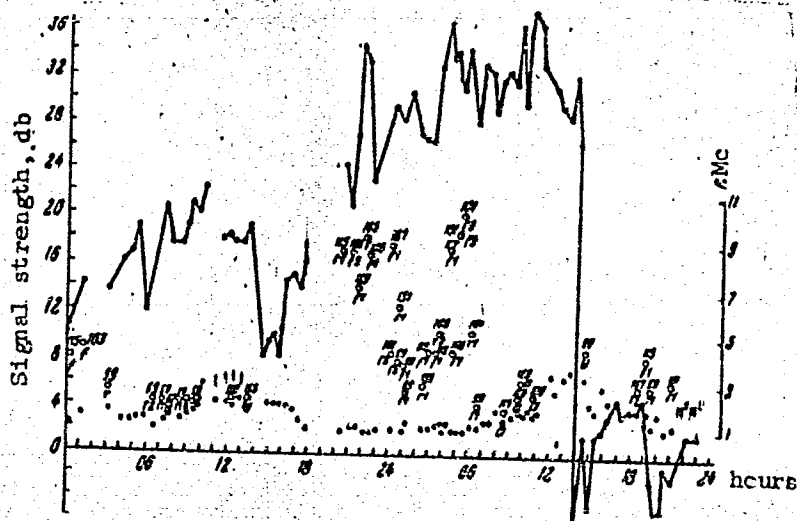


Fig. 2. Hourly variations in signal level recorded on 28-29 October 1962 (Moscow time)

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L 21123-66

ACC NR: AP6006672

of  $f_{\min}$ . However, a sharp rise in the signal level, after 1800 hours on 28 October, coincided with a sharp increase in the critical frequency of the  $E_s$  layer, and a sharp drop in the signal level, observed between 1300 and 1400 hours on 29 October, coincided with the disappearance of the F1 layer.

The possibility that inhomogeneities in the lower region of the F layer have some effect on signal strength, even at such a relatively short distance as Leningrad-Murmansk, is not entirely discounted. However, no clear connection was established between  $fE_s$  or  $f_{\min}$  on the one hand and the intensity of ultrashort-wave signals on the other. At the same time, a definite link was established between the signal strength and ionospheric parameters.

If the  $E_s$  layer is absent, or if  $fE_s$  is low ( $\leq 3$  Mc) and the layer itself is not observed systematically, then inhomogeneities in the absorption region ( $h \sim 65-90$  km) apparently play a major role in signal formation at the receiving point. Moreover, when  $E_s$  is observed continuously and when its critical frequency attains high values ( $fE_s \geq 7$  Mc), the signal strength is determined either by inhomogeneities in the E region ( $h \sim 100$  km) or by

Card 4/5

L 24123-66

ACC NR: AP6006672

mirror reflections from the layer. Thus by knowing the mechanism which governs both the variations in  $fE_g$  and the absorption at the midpoint of the signal path, the altitude at which effective scattering takes place can be established.

A rise in signal strength coincides with the appearance of a thin sporadic plane layer of type f in the scattering region. It is assumed that such plane inhomogeneities frequently determine the signal level at the receiving point. Orig. art. has: 2 figures. [FSB: v. 2, no. 4]

SUB CODE: 17, 09, 04 / SUBM DATE: 30Apr65 / ORIG REF: 001 / OTH REF: 004

Card 5/5 *HW*

36516-66 EWI(m)/EWP(j) RM

ACC NR: AP6017884

SOURCE CODE: UR/0052/66/000/005/0944/0944

AUTHOR: Nesmeyanov, A. N.; Kursanov, D. N.; Setkina, V. N.; Kislyakova, N.V.;  
Kolobova, D. N.; Anisimov, K. N.

ORG: Institute of Organometallic Compounds, Academy of Sciences, SSSR (Institut  
elementoorganicheskikh sovedinoniy Akademii nauk SSSR)

TITLE: Isotopic exchange of hydrogen atoms of manganese cyclopentadienyltricarbonyl  
and rhenium cyclopentadienyltricarbonyl in alkaline media

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 5, 1966, 944

TOPIC TAGS: hydrogen, manganese compound, rhenium compound, deuterium, *isotope,*  
*isotopic exchange*

ABSTRACT: The authors found that manganese cyclopentadienyltricarbonyl (MCT) and rhenium cyclopentadienyltricarbonyl (RCT) enter into the reaction of isotopic exchange of hydrogen under the influence of alkali catalysts. For example, all the hydrogen atoms of the cyclopentadienyl rings of MCT and RCT are exchanged for deuterium in the reaction with deuterioethanol in the presence of sodium alcoholate. The kinetics of this reaction were studied at 100°C at molar ratios MCT or RCT:C<sub>2</sub>H<sub>5</sub>OD:C<sub>2</sub>H<sub>5</sub>ONa = 1:120:9.5. The rate constants of hydrogen exchange under these conditions are 3 x 10<sup>-6</sup> sec<sup>-1</sup> and 80 x 10<sup>-6</sup> sec<sup>-1</sup> for MCT and RCT respectively, i.e., the relative reactivity of the cyclopentadienyl rings of the rhenium derivative is almost 27 times that of

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UDC: 547.1'3 + 541.127 + 539.183.2 + 651.183.123

L 36516-66

ACC NR: AP6017884

the cyclopentadienyl derivative of manganese. The opposite relationship is observed in acid catalysis, and the exchange capacity of the hydrogen atoms in the cyclopentadienyl rings linked to manganese is higher than in the rhenium compounds. It is concluded that on passing from Mn (an element of period 4) to Re (period 6) of group VII of the periodic system, the reactivity of cyclopentadienyl ligands in acid media decreases, whereas in alkaline media the opposite is observed.

SUB CODE: 07/ SUBM DATE: 12Feb66/ ORIG REF: 002/ OTH REF: 001

Card

2/2/mL P

KOLOBOVA, G.A.

Summaries of papers presented at the XXVI Congress of Surgeons of the USSR, Moscow, 20 - 27 January 1955, included:

Twenty Years' Experience of Surgical Treatment of Chronic Lung Suppurations.

B. E. LINBERG and G. A. KOLOBOVA

SOURCE: ~~XXXXXXXXXX~~ A-46013 (Official Publication) Unclassified.

ACC NR: AP7003146

SOURCE CODE: UR/0368/66/005/006/0706/0711

AUTHOR: Preobrazhenskiy, N. G.; Kolobova, G. A.; Terpugova, N. S.

ORG: none

TITLE: Theory of quantitative spectrum analysis with a laser excitation source

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 6, 1966, 706-711

TOPIC TAGS: laser application, spectrum analysis, quantitative analysis, optic density, laser spectroscopy

ABSTRACT: The extensive inhomogeneity and considerable optical density characteristic of the luminous layer produced by using a laser to heat a specimen make conventional methods for recording the integral line intensity unsuitable. The spectral region separating the self-reversed maxima is preferable as a measure of the concentration of the element in question. The paper contains a theoretical study of the dependence of the above spectral region on the optical thickness of the emitting layer under various conditions of spectrum excitation. Orig. art. has: 19 formulas and 2 figures. [Authors' abstract] [AM]

SUB CODE: 20/SUBM DATE: 26Jul65/ORIG REF: 007/OTH REF: 006/

Card 1/1

UDC: 543.42

1. ALEKSEYEVA, T. B.; ASKENAZI, YE. S.; ZAKHARCHUKOV, A. P.; KULCHIKOVA, G. V.;  
CHISOVSKAYA, A. I.

2. USSR (600)

4. Paper Industry

7. Effect of the degree of polymerization of pulp on its characteristics in the  
hollander process. Sam. prom. 27, No. 7, 1952

*Handwritten:*  
10 9-6

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

KOLOBOVA, G. V.

N. A. Afonchikov, G. V. Kolobova, P. N. Mikhaylov, and M. G. Voronkov,  
"Their Application for Glueing Paper."

Report presented at the Second All-Union Conference on the Chemistry and  
Practical Application of Silicon-Organic Compounds held in Leningrad from  
25-27 September 1958.  
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

SOV/80-32-2-42/56

AUTHORS: Afonchikov, N.A., Kolobova, G.V., Mikhaylov, P.N., Voronkov, M.G.

TITLE: The Application of Silicon-Organic Compounds for the Gluing of Paper (Primeneniye kremneorganicheskikh soyedineniy dlya prokleyki bumagi)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 445-446 (USSR)

ABSTRACT: Silicon-organic compounds were used a) for treating the finished paper with vapors of methyltrichlorosilane; b) for impregnating the paper by these compounds; c) for gluing the paper mass by such substances. The last procedure shows the best results. The compound MN-1 ( $\text{CH}_3\text{SiHO}$ )<sub>n</sub> is most efficient. Thermal processing of the finished paper is necessary, however, in order to obtain a great depth of gluing. If certain catalysts are used, e.g. lead or zinc acetate, triethanolamine, etc, thermal processing is not necessary. The catalyst is also added to the paper mass where it has the best effect. Professor B.N. Dolgov is mentioned in the article.

Card 1/2

There is 1 table.

SOV/80-32-2-42/56

The Application of Silicon-Organic Compounds for the Gluing of Paper

ASSOCIATION: Fabrika "Goznak" i institut khimii silikatov AN SSSR (Factory  
"Goznak" and the Institute of the Chemistry of Silicates of  
the USSR Academy of Sciences)

SUBMITTED: April 22, 1958

Card 2/2

S/661/61/000/006/076/081  
D287/D302

AUTHORS: Afonchikov, N. A., Kolobova, G. V., Mikhaylov, P. N.  
and Voronkov, M. G.

TITLE: The use of organosilicon compounds in paper-sizing

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh  
soyedineniy; trudy konferentsii, no. 6: Doklady, diskus-  
sii, resheniye. II Vses. konfer. po khimii i prakt. prim.  
kremneorg. soyed., Len. 1958, Leningrad, Izd-vo AN SSSR,  
1961, 336

TEXT: The Leningradskaya bumazhnaya fabrika 'Gosnak' (Leningrad Pa-  
per Factory 'Goznak') carried out, in conjunction with the Institut  
khimii silikatov AN SSSR (Institute for Silicate Chemistry, AS  
USSR), experiments on the use of organosilicon compounds in the pa-  
per industry. The paper should possess hydrophobic properties which  
prevent the soaking in of ink. Organosilicon compounds do not show  
the same disadvantages as colophony (which is generally used for  
this purpose). The authors used the substance MH-1 (MN-1) (which

Card 1/2

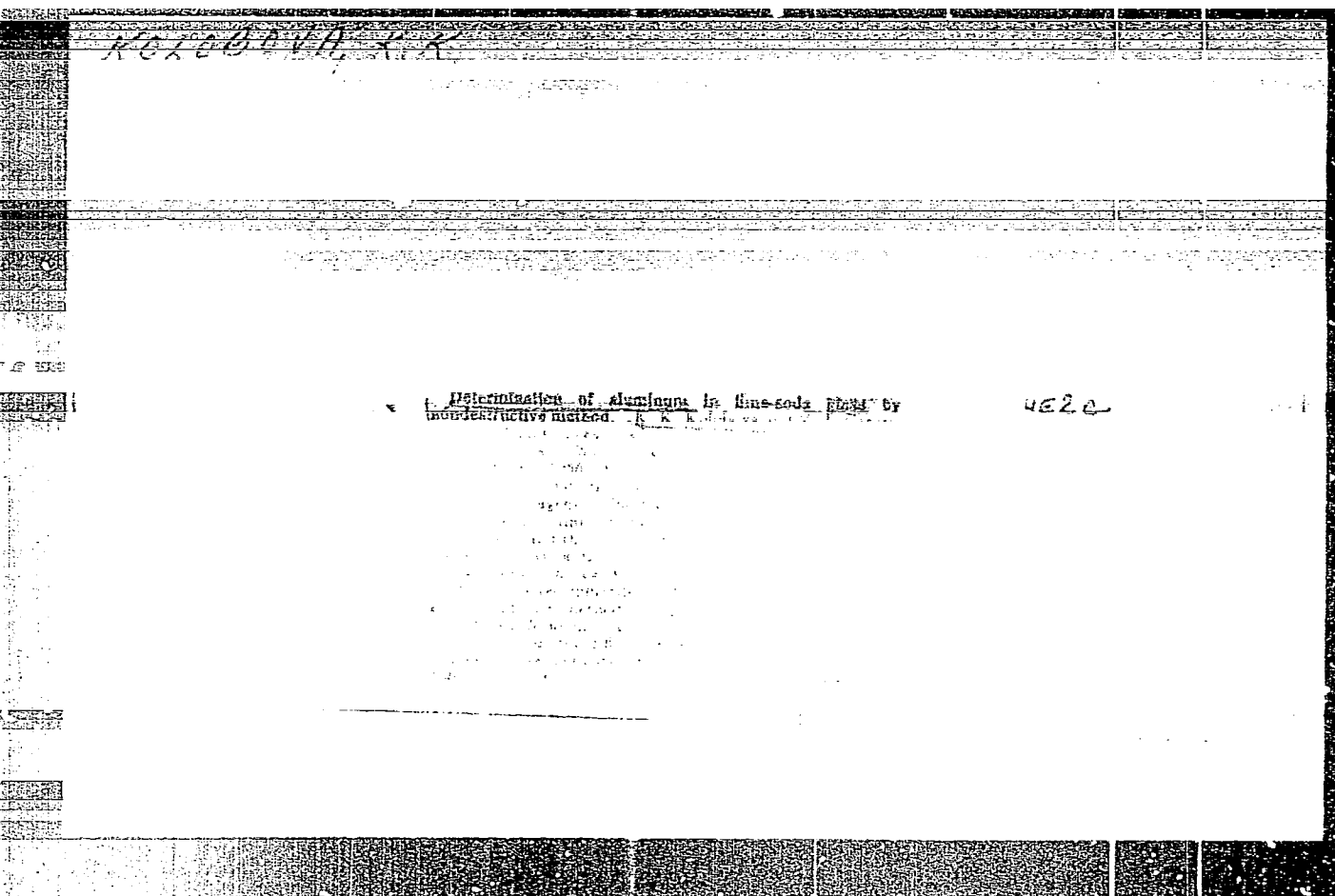
117 AND 118 COLUMNS										119 AND 120 COLUMNS									
PROCESSES AND PROPERTIES INDEX										119 AND 120 COLUMNS									
<div style="float: left; width: 100px; text-align: center;">CA</div> <div style="float: right; width: 100px; text-align: center;">2</div> <div style="clear: both;"></div> <p>Equilibrium diagram for the system <math>\text{CaO-SiO}_2</math>. K. K. Kolobov, <i>J. Appl. Chem. (U.S.S.R.)</i> 14, 928-34 (1941) (German summary).—The liquidus line in <math>\text{CaO-SiO}_2</math> was established between 21 and 100% <math>\text{CaO}</math>. Eutectic reaction between <math>\text{CaO}</math> and <math>2\text{CaO} \cdot \text{SiO}_2</math> was confirmed; it occurs at <math>2040^\circ</math> (<math>\pm 20^\circ</math>). Existence of <math>2\text{CaO} \cdot \text{SiO}_2</math>, <math>2\text{CaO} \cdot 3\text{SiO}_2</math>, and <math>\text{CaO} \cdot \text{SiO}_2</math> (m. <math>1855^\circ</math>) was confirmed. A eutectic is formed between <math>2\text{CaO} \cdot 3\text{SiO}_2</math> and <math>\alpha\text{-CaO} \cdot \text{SiO}_2</math> at <math>1400^\circ</math>; between <math>\alpha\text{-CaO} \cdot \text{SiO}_2</math> and tridymite, at <math>1440^\circ</math>. Wollastonite changes into pseudowollastonite at <math>1100^\circ</math> in the solid state. <math>\text{CaSiO}_3</math> does not form solid solns. with <math>\text{CaO}</math> or <math>\text{SiO}_2</math>. G. M. Kosolapoff</p>										<div style="text-align: center;">119 AND 120 COLUMNS</div>									
ASR-ELA METALLURGICAL LITERATURE CLASSIFICATION										FROM SOURCE									
FROM SOURCE										FROM SOURCE									
FROM SOURCE										FROM SOURCE									

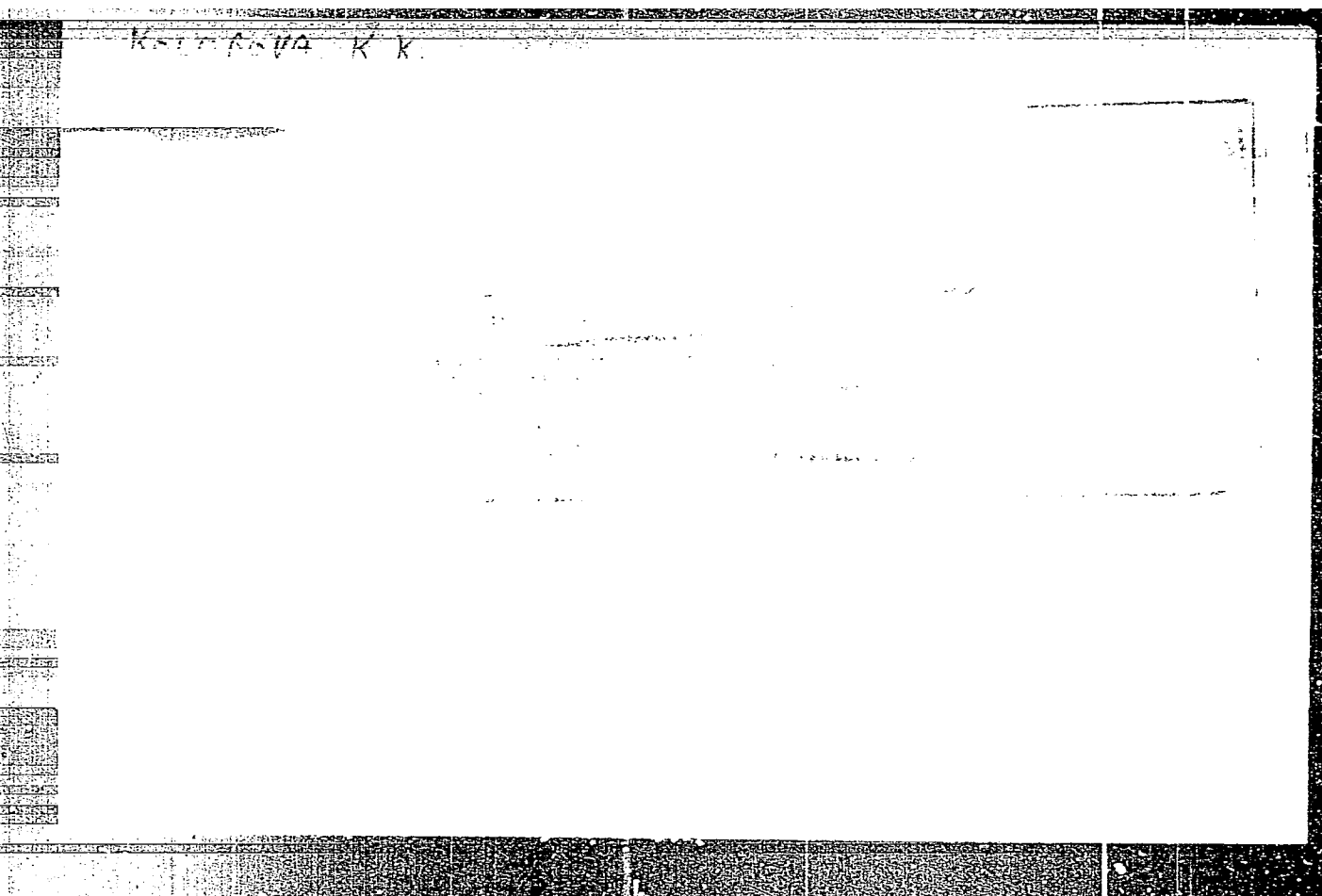
1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p><b>Analysis of cupric and cuprous colors for melting aventurine glass.</b> K. K. KULONOVA AND A. I. GERAMOVA. <i>Izvestiya Prom.</i>, 10 [12] 39-40 (1930).—Various Russian glassworks use charges with admixtures of <math>\text{Cu}_2\text{O}</math> and <math>\text{CuO}</math>. As a rule, these prepared colors contain complex mixtures of different compounds, particularly metallic Cu and its oxygen compounds. In analyzing a mixture containing Cu, <math>\text{CuO}</math>, and <math>\text{Cu}_2\text{O}</math>, the Cu is dissolved with <math>\text{AgNO}_3</math> and a second sample is treated with <math>\text{H}_2\text{SO}_4</math> (5 to 10%) in an atmosphere of <math>\text{CO}_2</math> to dissolve the <math>\text{CuO}</math> and half of the Cu from the <math>\text{Cu}_2\text{O}</math>; the residue is treated with strong <math>\text{HNO}_3</math>, and total metallic Cu is determined. The rest of the results are calculated. B.Z.K.</p>																																																			
<p>ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
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SIGNI ETIVISIA																										SIGNI BOMIV																									

CA 19

Analysis of cupric and cuprous colors in the melting of  
aventurine glass. K. M. Katskov and A. I. Gerasimova.  
*Lekhsy Prom.* 10, No. 12, 29-30 (1950).--Various Russian  
glass works use charges with admixts. of  $\text{CuO}$  and  $\text{Cu}_2\text{O}$ .  
These prepd. colors usually contain complex mixts. of dif-  
ferent compds., particularly metallic Cu and its O compds.  
In analyzing a mixt. contg. Cu,  $\text{Cu}_2\text{O}$ , and  $\text{CuO}$ , the Cu is  
dissolved with  $\text{AgNO}_3$  and a second sample is treated with  
 $\text{H}_2\text{SO}_4$  (5-10%) in an atm. of  $\text{CO}_2$  to dissolve the  $\text{CuO}$  and  
half of the Cu from the  $\text{Cu}_2\text{O}$ ; the residue is treated with

strong  $\text{HNO}_3$  and total metallic Cu is detd. The rest of  
the results are calcd. B. Z. Kamich





BAIADAWA K K

1944 Determination of silica in lime-soda glass.  
K. M. Kozlov and V. A. Gerasimova.

Working Paper, Glass, 1944, No. 1, p. 1.

1. Confined areas on the surface of standard and sample glass are treated with 10% sodium hydroxide solution. The liquid is stirred in the heated glass and 5 to 6 drops of water are added to each point, which is then washed into a 200-ml calibrated flask. Each point is rinsed with 10 drops of dil.  $H_2SO_4$  (1:4-N) and diluted to mark. Portions containing 10 ml are used for measuring.

2. 2 drops of a 2 per cent. aluminum nitrate solution (to prevent interference from Fe) and 5 drops of freshly prepared 5 per cent. ammonium molybdate solution are added. After 10 min., 5 drops of a 2 per cent. tartaric acid solution and then 5 drops of 1 per cent. ascorbic acid solution are added. The colors are measured after 10 min.

Kolobova, K.K.

USSR/ Analytical Chemistry - Analysis of Inorganic Substances

G-2

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12037

Author : Kolobova K.K., Gerasimova V.A.

Title : Colorimetric Method for the Determination of Sodium  
in Soda-Lime Glass without Taking a Weighed Sample

Orig Pub : Zavod. laboratoriya, 1956, 22, No 7, 794-795

Abstract : On the cleansed surface of a standard and of the glass sample being tested, within a specially provided paraffin-enclosed area, are placed 2 drops of  $H_2F_2$  and allowed to remain there for 5 minutes while being stirred with a paraffin-coated glass rod. After 5 minutes into each of the paraffin enclosed areas are added 2 drops of water and the resulting solutions are transferred, by means of glass capillaries, into Pt crucibles. The paraffin enclosed areas are rinsed 4-5 times with water, which is applied 1 drop at a time, and the washings are added to the previously obtained solutions. After this there is added to each

Card 1/3

KRYACHKOVA, T.N., mladshiy nauchnyy sotrudnik; KOLOBOVA, K.K., kand.  
khimicheskikh nauk

Rapid EDTA analysis for determining the content of calcium and  
magnesium in magnesites using hydron 1. Trudy Inst. ogneup.  
no.29:185-190 '60. (MIRA 14:12)

(Acetic acid)  
(Magnesite--Analysis)

L 36881-66 EWT(m)/EWP(e)/EWP(t)/ETI IJP(c) JD/WH

ACC NR: AP6019874

SOURCE CODE: UR/0131/66/000/002/0056/0058

AUTHOR: Kolobova, K. K.; Yakovleva, V. S.ORG: All-Union Institute of RefractoriesTITLE: Determination of the content of elemental silicon and SiO when both are present

SOURCE: Ogneupory, no. 2, 1966, 56-58

TOPIC TAGS: silicon, silicon oxide, carborundum refractory

ABSTRACT: Several methods were tested in an effort to develop the best technique for determining elemental silicon ( $Si_{el}$ ) and SiO when they are present together. Synthetic mixtures of SiO and  $Si_{el}$  were analyzed by dissolving in hydrofluoric acid. A method employed by the East-German plant of Dresden Reich for determining  $Si_{el}$  in electrolytically produced corundum was modified and found to be fully applicable to the analysis in question. It is carried out on two weighed samples: (1) the total percent content of  $Si_{el}$  and SiO is determined in terms of Si, and (2)  $Si_{el}$  is determined after treatment of the sample with acid. The method assumes particular importance in connection with the expansion of the industrial production of carborundum refractories. It is applicable to the analysis of the latter if they do not contain metallic aluminum or iron silicides. Orig. art. has: 1 figure and 2 tables.

SUB CODE: 07, 11/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 003

Card 1/1 LS

UDC: 546.28:543

NEMNOV, S.A.; TRAPZNIKOV, V.A.; KOLOBOVA, K.M.

X-ray spectroscopic investigation of iron-molybdenum and iron-aluminum  
alloys. Issl. po sharopr. splav. 3:279-291 '58. (MIRA 11:11)  
(Iron-molybdenum alloys--Metallography)  
(Iron-aluminum alloys--Metallography) (X-ray spectroscopy)

AUTHORS: Nemnonov, S. A. and Kolobova, K. M. SOV/126-6-1-30/33

TITLE: On the Character of Interatomic Bonds in Iron-Aluminium Alloys (K voprosu o kharaktere mezhatomnykh sil svyazi v zhelezoaluminiumnykh splavakh)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 1, pp 183-185 (USSR)

ABSTRACT: In an earlier work (Ref. 1) the authors analysed data indicating a lowering of the value of the asymmetry index of certain spectrum lines of iron as a function of the concentration and the valency of the non-transient element (aluminium and zinc) entering in an iron-base alloy and the conclusion was arrived at that a part of the electrons of the most external atoms of aluminium or zinc entering into the electron group of the crystal can penetrate into the 3d-band of the iron atoms and reduce there the number of non-compensated spin electrons which bring about the asymmetry index  $K_{\alpha_1}$  of the spectrum line and the magnitude

of the average atomic magnetic moment of the alloy. Therefrom the assumption was expressed that in iron-aluminium alloys, in addition to a metallic bond, an

Card 1/2

On the Character of Interatomic Bonds in Iron-Aluminium Alloys SOV/126-6-1-30/33

ionic component of the interatomic interaction exists, the importance of which should increase with increasing aluminium concentration. In this paper the authors investigated the fine structure of the K-absorption spectra of iron in iron-aluminium alloys of the same composition (9.9, 17, 25, 50 and 75 at.% aluminium) and the same heat treatment as in the above mentioned paper. The absorption spectra of the iron were obtained at room temperature of the absorbing element; the linear dispersion amounted to 2.5 XE/mm. Sharply pronounced absorption maxima were observed in some alloys which is characteristic indication of the presence of ionic bonds. There are 2 figures, 1 table and 12 references, 5 of which are Soviet, 4 English, 3 German.

ASSOCIATION: Institut fiziki metallov Ural'skogo filiala AN SSSR  
(Institute of Metal Physics, Ural Branch, Ac.Sc. USSR)  
SUBMITTED: August 5, 1957

Card 2/2 1. Aluminum-iron alloys--Atomic structure 2. Aluminum-iron alloys--Bonding 3. Aluminum-iron alloys--Spectra

AUTHORS: Nemnonov, S.A. and Kolobova, K. M. SOV/126-6-3-11/32

TITLE: The Relations between Certain Magnetic and X-ray Characteristics of Iron-base Alloys (O vzaimosvyazi nekotorykh rentgenospektral'nykh i magnitnykh kharakteristik splavov na osnove zheleza)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 3, pp 466-474 (USSR)

ABSTRACT: The discussion relates to the line shapes of the  $K\alpha_1$  lines, which show maximal asymmetry at Fe (caused by 3d-2p interaction), but no splitting (the same applies to  $K\alpha_2$ ). The line asymmetry and magnetic moment of the divalent ion run parallel in the elements around Fe (Fig.1). Only Fe-Al and Fe-Zn alloys are used (10, 18, 25, 50 and 75 at.% Al; 28, 50 and 75 at.% Zn), with armco iron. The Al-Fe alloys were homogenized at 850-900°C for 25-30 hours (after preparation by vacuum fusion); the Zn-Fe were prepared by diffusing the Zn under vacuum into Fe foil at 670-680°C over thirty hours, followed by holding at 700-750°C for 12-15 hours. The lines were excited either by direct electron bombardment, or in fluorescence, and examined on a bent-crystal spectrogram

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SOV/126-6-3-11/32  
The Relations between Certain Magnetic and X-ray Characteristics  
of Iron-base Alloys

of dispersion about 3 kX/mm. Tables 1 and 2 give the experimental and calculated line asymmetries, which agree well. Fig. 2 shows these results, plus some on alloys with Mo (abscissa at.% alloying element). The results are considered to indicate a partial rearrangement of the 3d shell in the Fe, but the nature of the interatomic bonds is neglected. The effects to be expected in the two-phase regions of composition are considered, and shown to be ~~ic~~ (within the rather large experimental errors) in the results presented for Zn-Fe, though the effects are rather complicated. Figs. 3 and 4 compare the variations of Bohr magneton number with content of alloying element for Ni and Fe respectively (the Ni results are from references (10 and (11)); Snyder's explanation (Ref. 3) is in general confirmed.

Card 2/3

SOV/126-6-3-11/32  
The Relations between Certain Magnetic and X-ray Characteristics  
of Iron-base Alloys

There are 4 figures, 2 tables and 12 references, 6 of  
which are Soviet, 6 English.

ASSOCIATION: Institut fiziki metallov Ural'skogo filiala AN SSSR  
(Institute of Metal Physics, Ural Branch of the  
Ac.Sc., USSR)

SUBMITTED: January 24, 1957

1. Iron alloys--X-ray analysis    2. Electron bombardment--Appli-  
cations    3. Iron alloys--Magnetic properties

Card 3/3

18.9000

66244

SOV/126-8-3-33/33

**AUTHORS:** Nemnonov, S.A. and Kolobova, K.M.

**TITLE:** X-Ray K-Spectrum of Iron Absorption at the Temperature of Liquid Nitrogen

**PERIODICAL:** Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 3, pp 478-480 (USSR)

**ABSTRACT:** The authors have carried out an investigation of the K-spectrum of pure iron absorption at two temperatures, +20 and -180°C. The specially constructed container for liquid nitrogen had a common vacuum with a spectrograph. The temperature of the absorbent was determined by means of a copper-constantan thermocouple welded to the absorption apparatus and corresponded to -180°C. The spectra were photographed in a first-order reflection of the crystallographic quartz plane (1340). The dispersion in the region under consideration was 2.5 XE/mm. In Fig 1, K-region curves of iron absorption obtained at +20 and -180°C are shown. Microphotograms of these regions, registered in an MF-4 instrument, are shown in Fig 2. All spectra were obtained from one and the same absorbent. The table (p 480) shows the ratios between fluctuation amplitudes. The authors assume that

Card 1/2

S/520/59/000/022/006/021  
E193/483

AUTHOR: Kolobova, K.M.

TITLE: The Effect of Silicon Concentration in Iron-Silicon  
Alloys on the Magnitude of the Index of Asymmetry of  
the Iron  $K_{\alpha 1,2}$  - lines

PERIODICAL: Akademiya nauk SSSR. Ural'skiy filial, Sverdlovsk.  
Institut fiziki metallov. Trudy, No.22, 1959, pp.51-54

TEXT: Unalloyed iron and five Fe-Si alloys, containing 9, 17, 25, 50 and 70 at.% Si, were used in the present investigation. The alloys were prepared from Armco iron and metallic silicon by melting in a vacuum induction furnace at the laboratoriya pretsizionnykh splavov Instituta fiziki metallov AN SSSR (Precision Alloys Laboratory, Institute of Physics of Metals, AS USSR). After a homogenizing treatment (20 to 25 h at 700 to 800°C), targets in the form of discs (1 to 1.5 mm thick) were cut from the ingots of iron and alloys with the silicon content  $\leq 50$  at.%. The ingots of the Si-rich alloys (50 and 70 at.% Si) were pulverized, and the targets were prepared by the powder metallurgy technique. All targets were then annealed for 2 h at 700 to 800°C, after which they were used to obtain X-ray emission spectra, Card 1/4

The Effect of Silicon ...

S/520/59/000/022/006/021  
E193/E483

photographed with the aid of a bent quartz crystal spectrometer. Microphoto-measurements of the obtained spectrograms were carried out visually with the aid of photometers  $M\Phi-2$  (MF-2) and  $M\Phi-4$  (MF-4). The asymmetry index and the width of the  $K_{\alpha 1,2}$ -lines were determined in the following manner: (1) the parallelism of the  $K_{\alpha 1,2}$ -lines on the spectrometer of a given photometer target was checked; (2) the values, characterizing the width and asymmetry of the  $K_{\alpha 1,2}$ -lines, were determined by the difference between two readings of the Vernier of the micrometer screw, moving the photometer carriage on which the spectrogram was mounted; the width of the  $K_{\alpha 1}$ -line was measured at the level of blackening which corresponded to the level of blackening of the peak of the  $K_{\alpha 2}$ -line; measurement of the width of the  $K_{\alpha 2}$ -line was carried out at that blackening level which, when converted with the aid of the sensitometer-curve, corresponded to half of the maximum intensity of this line. Measurements of the asymmetry index of the  $K_{\alpha 1,2}$ -lines were carried out in a similar manner, except that in this case the long-wave segment/short-wave segment ratio was determined, the widths of the segments having been measured at the level of blackening of the peak of the

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The Effect of Silicon ...

S/520/59/000/022/006/021  
E193/E483

$K_{\alpha 2}$  - line, and at the level of maximum blackening of the line studied. Analysis of the experimental results showed that (1) the magnitude of the asymmetry index of the  $K_{\alpha 1,2}$  - lines of the alloys studied decreases with increasing Si-content; (2) the relative width of the lines also decreases with increasing Si-content; (3) the inter-doublet spacing remains practically constant for all the alloys studied. Some of the results obtained are reproduced in Fig.1, where the asymmetry index of the  $K_{\alpha 1}$  - line is plotted against the Si-content (at.%) of the alloys (points indicated by circles having been calculated from a formula derived by S.A.Nemnonov and K.M.Kolobova (Ref.3)) and in Fig.2, which shows the microphotograph of the profiles of the  $K_{\alpha 1,2}$  - lines of iron in unalloyed specimen (upper curve) and in the 70 at.% Si-Fe alloy (lower curve). It was concluded that the results of the present investigation have confirmed the hypothesis put forward by other workers (Refs.2,3,4) according to whom the basic cause of asymmetry of the  $K_{\alpha 1,2}$  - lines of the transition elements of the Fe group is the presence of uncompensated 3d-electrons in atoms of these elements. There are 2 figures, 1 table and 5 references:

Card 3/4

The Effect of Silicon ...

S/520/59/000/022/006/021  
E193/E483

3 Soviet and 2 non-Soviet (one of which is translated into Russian).

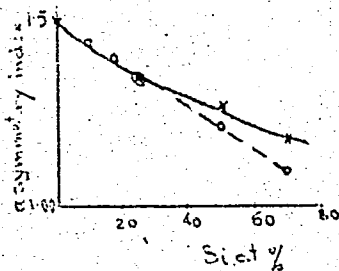


Fig. 1.

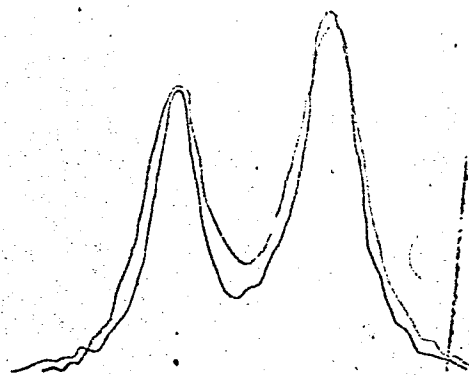


Fig. 2.

Card 4/4

S/126/60/009/02/014/033

AUTHORS: Nemnonov, S.A., Finkel'shteyn, L.D. and Kolobova, K.M. <sup>E111/E335</sup> 21  
TITLE: X-ray Diffraction and X-ray Spectroscopic Investigation  
of Interatomic Bonding Forces in Iron-aluminium Alloys  
PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 2,  
pp 243 - 247 (USSR)

ABSTRACT: Two of the authors (Refs 3,4) have studied iron-aluminium alloys (9-75 at.% Al) by X-ray spectroscopic methods. They concluded that in the interaction of iron and aluminium atoms iron is electronegative with respect to aluminium. Further information on atomic interaction has been obtained by neutron-diffraction measurements of atomic magnetic moments (Ref 5). According to other works (Ref 6) in alloys with less than 25 at.% Al a closest order of the  $Fe_3Al$  type exists. The concentration redistribution of aluminium would appear to be the physical nature of the K-state in the given alloys. The Debye temperature and associated values are sensitive to the presence of the K-state and the authors therefore studied

Card 1/3

S/126/60/009/02/014/033

E111/E535

X-ray Diffraction and X-ray Spectroscopic Investigation of  
Interatomic Bonding Forces in Iron-aluminium Alloys

their variations in iron-aluminium alloys (2, 4, 10, 17, 25 and 50 at.% Al), previously homogenized at 800 °C and annealed at temperatures under 550 °C (heat treatment details and results are tabulated). Published (Ref 8) methods were used. A parallel study was also made of the ratio of the amplitudes of fluctuation of the coefficient of absorption of the fine structure of the K-region of iron absorption (Figure 1 shows the general form of K-region iron-absorption). Figure 2 shows the ratio and the Debye temperature as functions of aluminium content (0-25 at.% Al), while in Figure 3 K-region characteristics are similarly plotted (0-50 at.% Al). In work by two of the authors (Nemnonov and Kolobova) being published the sensitivity was noted of one of these characteristics, the energy interval between points corresponding to  $3/4$  and  $1/4$  of the height of the initial absorption range, to temperature (thermal oscillation). The reduction in its value towards 17 at.% Al in Figure 3 therefore confirms the indications of Figure 2 of

Card 2/3


S/126/60/009/02/014/033  
E111/E335  
X-ray Diffraction and X-ray Spectroscopic Investigation of  
Interatomic Bonding Forces in Iron-aluminium Alloys  
increasing strength of interatomic bonds in iron-aluminium  
alloys.

There are 3 figures, 1 table and 12 references, 9 of  
which are Soviet, 2 English and 1 German.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of  
Physics of Metals of the Ac.Sc., USSR)

SUBMITTED: June.12, 1959

Card 3/5



S/126/62/014/004/008/017  
E111/E160

AUTHORS: Nemnonov, S.A., Sorokina, M.F., Men'shikov, A.Z.,  
Kolobova, K.M., and Finkel'shteyn, L.D.

TITLE: The character of the atomic interactions in the  
intermetallic compounds of the transition elements  
aluminium and silicon

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.4, 1962,  
535-541

TEXT: A combination of the crystallochemical and X-ray  
spectroscopic characteristics of the compounds examined with their  
physicochemical properties, enables one to assert that the  
character of the interatomic bonding forces in these compounds  
( $\text{Fe}_3\text{Al}$ ,  $\text{NiAl}_3$ ,  $\text{FeSi}$ ,  $\text{CrSi}$ ,  $\text{CrAl}_7$ ,  $\text{MnAl}_6$ ,  $\text{FeAl}_3$ ,  $\text{Co}_2\text{Al}_9$ ,  $\text{CuAl}_2$ , etc)  
is extremely complicated. The structural characteristics, the  
X-ray emission data and the magnetic properties show the presence,  
on a background of the predominantly metallic interaction, of  
certain localised bonds between different kinds of atoms, in which  
the 3d electrons of the transition metal actively participate.

Card 1/2

S/126/62/014/005/003/015  
E111/E435

AUTHORS: Nemnonov, S.A., Sorokina, M.F., Kolobova, K.M.,  
Men'shikov, A.Z.

TITLE: Investigation of the structure of absorption K-spectra  
of transition metals in intermetallic compounds with  
aluminium and silicon

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.5, 1962,  
666-672

TEXT: The K-edge of absorption has been studied of Cr-Al, Mn-Al, Fe-Al, Ni-Al, Cr-Si, Mn-Si, Fe-Si and Ni-Si alloys for ranges of concentration which included almost all the intermetallic compounds in these systems. For all the compounds investigated the "initial" (i.e. long wave-length) absorption remained fairly large and of the same order as in the pure metal. With increasing concentration of the transition component the break between the initial and the next intermediate region was smoothed. The energy position of the point corresponding to the Fermi boundary, mostly remained unchanged in most cases. The maximum which is characteristic of the pure transition metal was smoothed at a certain concentration of the second component, a new maximum

Card 1/2

NEMNONOV, S.A.; SOROKINA, M.F.; KOLOBOVA, K.M.; MEN'SHIKOV, A.Z.

Investigating the structure of K-absorption spectra of transition metals in intermetallic compounds with aluminum and silicon. Fiz.met.i metalloved. 14 no.5:666-672 N '62.

(MIRA 15:12)

1. Institut fiziki metallov AN SSSR.  
(Intermetallic compounds)(Absorption spectra)

NEMNOV, S. A.; SOROKINA, M. F.; MEN'SHIKOV, A. Z.; KOLOBOVA, K. M.;  
FINKEL'SHTEYN, L. D.

Interatomic interaction in intermetallic compounds with transition metal aluminum, and transition metal silicon. Fiz. met. i metalloved. 14 no.4:535-541 0 '62. (MIRA 15:10)

1. Institut fiziki metallov AN SSSR.

(Intermetallic compounds—Magnetic properties)  
(X-Ray spectroscopy)

NEMNOV, S.A.; KOLOBOVA, K.M.

Character of interatomic interactions and the state of internal  
iron atom electrons in silicides. Fiz.met.1 metalloved. 14  
no.6:874-879 D '62. (MIRA 16:2)

1. Institut fiziki metallov AN SSSR.  
(Iron silicide) (Electrons) (X-ray spectroscopy)

NEMMONOV, S.A.; KOLOBOVA, K.M.

Absorption spectra of manganese and iron in alloys and compounds  
of Al, Si, P, S, and Cl. Izv. AN SSR. Ser. fiz. 27 no. 3: 390-393  
Mr. '63. (MIRA 16:2)

1. Institut fiziki metallov AN SSSR.  
(Manganese-iron alloys) (X-ray absorption)

100-45 ENT(m)/EMP(1)/ENF(b) IJP(c) JP

ACCESSION NR: AP5018920

UR/0363/65/001/006/0877/0879  
546.282-31:539.26

16  
13  
B

AUTHOR: Gusatinskiy, A. N.; Kolobova, K. M.; Mikhaylov, N. S.; Nemnonov, S. A.

TITLE: Use of x-ray spectra in the detection of silicon monoxide

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 6, 1965,

silicon oxide, x-ray fluorescence

ABSTRACT: SiO was obtained from a compacted equimolar mixture of powdered Si and SiO<sub>2</sub> by sublimation in a vacuum. The temperature in the reaction zone was 1500°C. The condensation zone was at 1000°C. The product consisted of Si and SiO<sub>2</sub> particles. In order to obtain additional proof of this fact, K<sub>α1,2</sub> x-ray fluorescence spectra of silicon were taken in the product and also in pure silicon and SiO<sub>2</sub> (quartz). The results confirmed the earlier findings: actually a mixture of Si and SiO<sub>2</sub>, the latter being present in an amount of 10-15%. This does not mean, however, that the product is pure SiO. As indicated by the free energy data, the reaction of Si and SiO<sub>2</sub> to form SiO is not thermodynamically favorable at this oxide and the experimental conditions.

L 60891-65

ACCESSION NR: AP5018920

3

equiprobable. The study shows the usefulness of the x-ray spectral method in the identification of the compound  $SiO$  and approximate determination of the degree of its decomposition. In the case under consideration, this method was more sensitive than the x-ray structural method.

... who determined the ...  
 $Si_2(s) + Si(s)$  as a function of ... request.  
 ... figure and 1 formula.

Institut fiziki metallov AN SSSR  
 ... nauchno-issledovatel'skiy i ...  
 ... Institut (All-Union Scientific Research and Planning Institute of  
 Aluminum and Magnesium)

NO REF SOV: 005

OTHER: 001

SOV CODE: 10, OP

KHEYFITS, L.B.; KOLOBOVA, L.V.; FALEVSKAYA, Ye.A.; OTSING, A.D.

Epidemiology and clinical picture of Breslau salmonellosis.  
Sov.med. 23 no.7:97-102 J1 '59. (MIRA 12:11)

1. Iz Arkhangel'skogo nauchno-issledovatel'skogo instituta  
epidemiologii, mikrobiologii i gigiyeny (dir. M.Ya.Alfer'yeva)  
i Arkhangel'skoy gorodskoy infektsionnoy bol'nitsy (glavnyy  
vrach A.V.Kottsova).

(SALMONELLA INFECTIONS)

KOLOBOVA, L.Ya.

Forty years along the road. Vest. sviazi 24 no.8:28-29

Ag '64.

(MIRA 17:10)

*deceased*

BURYKH, Ye.B.; D'YAKONOV, M.V.; KOLOBOVA, M.I. [deceased]; KOLOBOV, V.M.;  
KONOVALOVA, K.A.; POPADAYKIN, V.I.; SKOTNIKOV, Yu.A.; TIKHONOVICH,  
S.S.; SHEPOVALOV, T.I. Prinsipali uchastiye YUN'YEVA, N.P.;  
POLYAK, Ye.V.; SUITANOVA, N., red.; YAKOVLEVA, Ye., tekhn.red.

[Memorable places in Moscow Province; a concise guidebook] Pa-  
miatnye mesta Moskovskoi oblasti; kratkii putevoditel'. Izd.3.,  
dop. i perer. Sost.E.B.Burykh i dr. Moskva, Mosk.rabochii, 1960.  
734 p. (MIRA 14:2)

1. Moscow. Oblastnoy krayevedcheskiy muzey. 2. Zamestitel' predse-  
datel'ya Moskovskogo oblastnogo obshchestva krayevedeniya (for  
Konovalova).

(Moscow Province--Guidebooks)

KOLOBOVA, M. L.

KOLOBOVA, M. L. "Ukrainian Phosphorites, their Chemical Composition and Agrochemical Characteristics." Acad Sci Ukrainian SSR. Inst of Plant Physiology and Agrochemistry. Min Higher Education USSR. Belaya Tserkov' Agricultural Inst. Belaya Tserkov', 1956. (Dissertation for the Degree of Candidate in Agricultural Science)

So: Knizhnaya Letopis', No. 19, 1956.

KOLOBOVA, M.V., inzhener; TSYKH, B.S., inzhener.

Effect of the quality of pine log wood upon the grades of lumber materials. Les.prom.14 no.4:29-30 Ap '54. (MLRA 7:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny. (Lumber--Grading) (Pine)

KOLOBOVA, M.V., inzh.; TSYKIN, B.S., inzh.

Output of clear pine lumber by sorts. Der. prom. 6 no.10:3-5 0 '57.  
(MIRA 10:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy  
obrabotki drevesiny.

(Lumber)

KOLOBOVA, N.S.

Central Polytechnical Library aids inventors, efficiency promoters,  
and innovators of the industrial production. Izobr.v SSSR 2  
no.5:42-43 Ky '57. (MLRA 10:7)  
(Engineering libraries)

ANTROPOVA, N.A.; KOLOBOVA, N.V., red.; ELAGORAZUMOV, P.N., red.;  
TROFINOVA, A.S., tekhn.red.

[Agroclimatic conditions of the Tatar A.S.S.R.] Agroklima-  
ticheskie usloviia Tatarskoi ASSR. Kazan', Tatarskoe knizhnoe  
izd-vo, 1959. 203 p. (MIRA 14:2)  
(Tatar A.S.S.R.--Crops and climate)

Kolobova, N. E.

USSR:

✓ Derivatives of unsaturated phosphonic acids. II. Chlorides of 2-alkoxy-1-phenoxyvinylthiophosphonic and 2-arylvinylthiophosphonic acids. K. N. Anisimov, N. E. Kolobova, and A. N. Nesmeyanov (N. D. Zelinskii Inst. Org. Chem., Acad. Sci. U.S.S.R., Moscow). *Izv. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1954, 790-8; cf. *C.A.* 49, 11540i. — To 83 g.  $\text{PCl}_5$  suspended in 300 ml.  $\text{C}_6\text{H}_6$  was slowly added 14.2 g.  $\text{EtOCH}=\text{CH}_2$  in 15 ml.  $\text{C}_6\text{H}_6$ , the mixt. heated the following day 0.5 hr. at  $60-5^\circ$ , and the suspension of  $\text{ROCH}=\text{CH}_2\text{PCl}_2\text{PCl}_3$  treated with a stream of dry  $\text{H}_2\text{S}$ ; much  $\text{HCl}$  and heat were evolved and distn. of the clear soln. gave  $\text{PSCl}_2$  and 74%  $\text{ROCH}=\text{CH}_2\text{CHPSCl}_2$  (I, R = Et), b.  $84^\circ$ ,  $n_D^{20}$  1.3422,  $d_4^{20}$  1.3334, a yellowish liq., quite stable to hydrolysis with  $\text{H}_2\text{O}$  and unreactive to  $\text{ROH}$  at room temp. Similarly were obtained the following I (R, % yield, b.p./mm.,  $n_D^{20}$ , and  $d_4^{20}$  given): *iso*-Pr, 75,  $02^\circ/2$ , 1.5224, 1.2854; Bu, 77,  $105^\circ/2$ , 1.5234, 1.2471; *n*-C<sub>10</sub>H<sub>7</sub>, 60,  $123^\circ/2$ , 1.5255, 1.1811; Ph, —,  $140^\circ/1$ , 1.5686, 1.1670 (40 g. from 24 g.  $\text{PhOCH}=\text{CH}_2$ ); also  $\text{PhCH}=\text{CHPS-CH}_3$ , —,  $130^\circ/2$ , 1.4439, 1.3533 (from styrene and  $\text{PCl}_5$ ). III. Chlorides of 2-(2-alkoxyethoxy)vinylthiophosphonic and 2-(2-alkoxyethoxy)vinylthiophosphonic acids. *Ibid.* 790-802. —  $\text{MeOCH}_2\text{CH}_2\text{OCH}=\text{CH}_2$  (20.4 g.) in  $\text{C}_6\text{H}_6$  added to a suspension of 33.6 g. powd.  $\text{PCl}_5$  in 150 ml.  $\text{C}_6\text{H}_6$ ; evolved heat and much  $\text{HCl}$ , with formation of 2 layers; on cooling the bottom layer solidified, and the product heated the following day 0.5 hr. at  $55-60^\circ$ , then treated with  $\text{SO}_2$ , yielded 95%  $\text{ROCH}_2\text{CH}_2\text{OCH}=\text{CHPOCl}_2$  (I, R = Me), b.  $115^\circ$ ,  $n_D^{20}$  1.4091,  $d_4^{20}$  1.3290. Similarly were obtained the following I (R, % yield, b.p.,  $n_D^{20}$ , and  $d_4^{20}$  given): Et, 97,  $123^\circ$ , 1.4020, (OVER)

*R. N. Kozlov*

(288); *Bu*, 60, 142°, 1.4869, 1.2133. Treatment of the intermediate adducts with  $H_2S$  instead of  $SO_2$  gave the following  $ROCH_2CH_2OCH_2CH_2PSCl_2$ : *Me*, 76, 113°, 1.5413, 1.3974; *Et*, 85, 120°, 1.5330, 1.2867; *Bu*, 80, 137°, 1.5108, 1.2210. IV. Chlorides of arylvinylphosphonic acids. K. N. Anshinov. *Ibid.*, 50:1-5. To 104 g.  $PCl_5$  suspended in 150 ml.  $C_6H_6$  was added 25.3 g. styrene in 50 ml.  $C_6H_6$  and the cryst. adduct treated the following day with  $SO_2$  until  $HCl$  evolution ceased and a clear soln. formed; distn. gave 96%  $PhCH_2CH_2P(OC_6H_5)_2$ , b: 139°, m. 71-2°, slowly attacked by cold  $H_2O$ . To 83 g.  $PCl_5$  suspended in  $C_6H_6$  (200 ml.) was added 24 g. indene in 20 ml.  $C_6H_6$  and the suspension dild. the following day with 60 ml.  $C_6H_6$  and heated to 65-70° while dry  $SO_2$  was passed into it, removal of  $HCl$  on a steam bath in *vacuo* and distn. of the residue gave 83% 2-indenylphosphonyl dichloride.

$C_6H_5CH_2CH_2C(POCl_2)_2CH_3$ , b: 133°, m. 73-4°. Similarly 83 g.  $PCl_5$  with 20 g.  $PhC_2CH$  gave 87%  $PhCCl_2CHPOCl_2$ , b: 142.5-3.5°, n<sub>D</sub><sup>20</sup> 1.5175, d<sub>4</sub> 1.4675, which is also but slowly attacked by cold  $H_2O$ . The above phosphonyl chlorides can also be obtained from the intermediate adducts by treatment with the calcd. amt. of  $H_2O$  (the yields are not cited). G. M. Kosolapoff

7/2

KOLOBOVA, N. E.; ANISIMOV, NESMEYANOV, A. N.

"3 Chlorides of arylvinylphosphonic Acids," Izvest Akad Nauk SSSR, Otdel  
Khim Nauk, 803-5 (1954).

N. D. Zelinskii Institute of Organic Chemistry of the Academy of Sciences, Moscow.

B-83602, 18 Mar 55

KOLOBOVA, N. Ye.

USSR/ Chemistry - Organic chemistry

Card 1/1 Pub. 40 - 7/26

Authors : Anisimov, K. N.; Kolobova, N. Ye.; and Nesmeyanov, A. N.

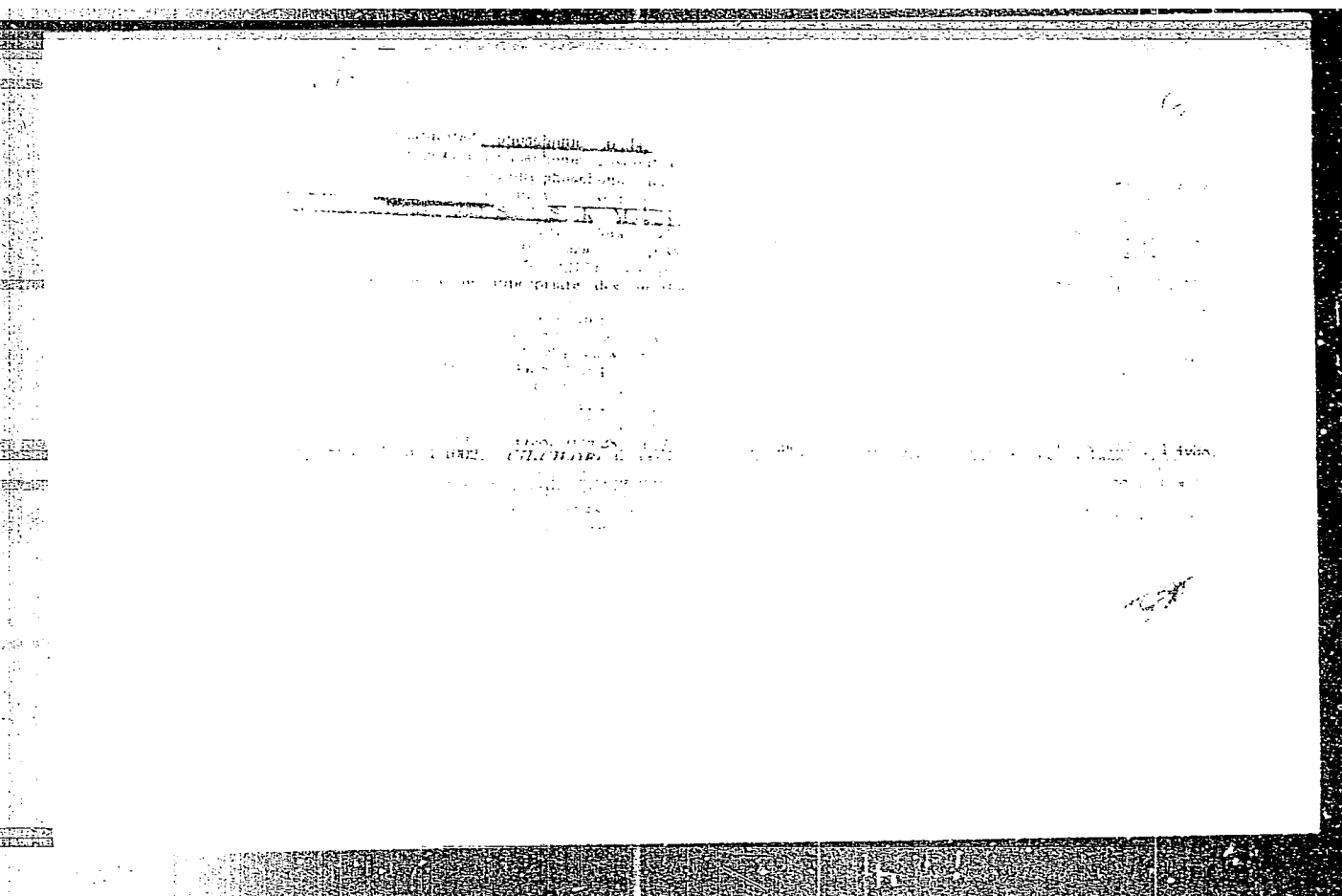
Title : Derivatives of unsaturated phosphinic acids. Part 5. Esters of beta-ethoxyvinylphosphinic, beta-n-propoxyvinylphosphinic, beta-n-butoxyvinylphosphinic and beta-n-hexyloxyvinylphosphinic acids.

Periodical : Izv. AN SSSR. Otd. khim. nauk 2, 240 - 248, Mar-Apr 1955

Abstract : The characteristics of ethoxy, propoxy, butoxy and hexyloxy-vinylphosphinic acid esters obtained during the reaction of alcohols with the dichloro anhydrides of these acids in the presence of pyridine are described. Data are also presented on the synthesis of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, allyl, n-hexyl, beta-methoxyethyl and beta-ethoxyethyl esters of the above mentioned acids. Thirteen references: 1 Polish and 12 USSR (1917-1954). Tables.

Institution : Acad. of Sc., USSR, Inst. of Organoelemental Compounds

Submitted : June 11, 1954



KOLOBOVA, N. Ye.

ANISIMOV, K. H.; KOLOBOVA, N. Ye.; NEMENYANOV, A. N.

Research in the field of unsaturated phosphinic acids. Report  
no. 7. Esters of  $\beta$ -phenoxyvinylphosphinic acid. Izv. AN SSSR.  
Otd. khim. nauk no. 3: 432-434 My-Je '55. (MIRA 8:9)

1. Institut elementoorganicheskikh soedineniy Akademii nauk  
SSSR.

(Phosphinic acid)

*Chem. Soc.* 1955, 691-6 (Engl. translation); cf. *ibid.* 49, 11540; 50, 6297. — To 5 g. Me<sub>2</sub>SiH in 100 ml. petr. ether was added with cooling 9.46 g. EtOCH<sub>2</sub>CHPhCO and the mixt., stirred 3 hrs., kept overnight, heated 2 hrs. at 50-60°, filtered, and distd., to yield 6.7% EtOCH<sub>2</sub>CHPhCO(NMe<sub>2</sub>) b. 168° at 1.4780 d<sub>20</sub> 1.4101. Similarly were prepd the EtOCH<sub>2</sub>CHPhCO(NMe<sub>2</sub>) and EtOCH<sub>2</sub>CHPhCO(NMe<sub>2</sub>)<sub>2</sub> in given resp. b. EtOCH<sub>2</sub>CHPhCO.

СЕРТИФИКАТ

[illegible]

BROTH: CHL. 100 ml. heated 2 hrs. on a steam bath.  
 night, dil. with 100 ml. Et<sub>2</sub>O, heated 2 hrs. on a steam bath.  
 100 ml. Et<sub>2</sub>O, heated 2 hrs. on a steam bath.

KALOROVA, N. E.

Hydrogenated phosphoric acid  
obtained by hydrogenation of  
phosphoric acid. 78  
English translation  
of 3-chloro-2-methyl-2-butene  
3,3-bis(dichloro-4-phosphoranyl)-2-butene  
31: 3542

Studies of derivatives of unsaturated phosphoric acids  
by E. G. Anisimov and N. B. Kozlovskaya (Inst. Khim. Akad. Nauk S.S.S.R., Leningrad)  
Dokl. Akad. Nauk S.S.S.R., 1967, 174, 1-4. (English)  
1968, 203-204 (Publ. 1967). A review, with 33 references, of  
the chemistry of esters and amides of unsat. phosphonic  
and thiophosphonic acids, mainly dealing with the work of  
the authors and N. B. Kozlovskaya (cf. C.A.B. 60, 1966).

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823910010-7

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823910010-7"

*Kolobova, N. Ye.*

ANISIMOV, K.N.; KOLOBOVA, N.Ye.; NESMAYANOV, A.N.

Research in the field of unsaturated phosphinic acids. Report no.9.

Complete esters of  $\phi$ -alkoxy(phenoxyl)vinylthiophosphinic acids.

Izv.AN SSSR.Otd.khim.nauk no.4:669-671 J1-Ag '55. (MLBA 9:1)

1.Institut elementeorganicheskikh soedineniy Akademii nauk SSSR.  
(Phosphinic acids)

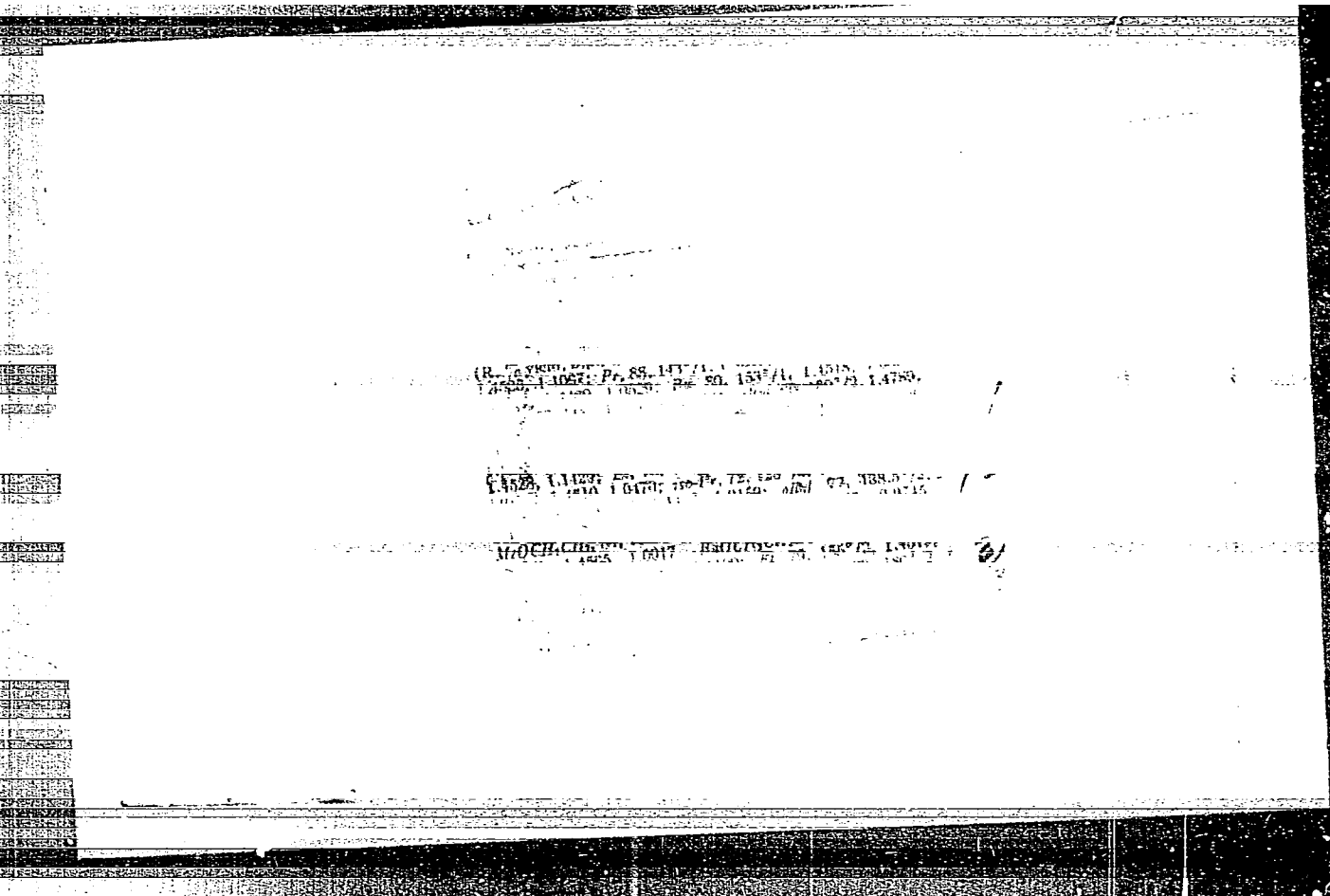
ACETONE N.E.

1.12

5.5.3.R. Odeh, Khim. Nauk 1955, 823-6; cf. C.A. 50, 20764. BISH (0 g.) added to 2.2 g. Na in Et<sub>2</sub>O, the Et<sub>2</sub>O suspension treated the following day with 0.46 g. EtOCH<sub>2</sub>CH<sub>2</sub>POCl<sub>2</sub> in Et<sub>2</sub>O, and the filtrate dried, after completion of the reaction gave 55.8% ROCH<sub>2</sub>CH<sub>2</sub>POXSEt<sub>2</sub> (R = Et).

*Print*

(OVER)





*Kolobova, N. Ye.*

ANISIMOV, K.M.; KOLOBOVA, N.Ye; NESMEYANOV, A.M.

Investigation into the unsaturated phosphinic acids. Part 11.  
The complete esters of *p*-alkoxyethoxyvinylphosphinic acids.  
Izv.AN SSSR.Otd.khim.nauk no.5:827-833 S-O '55. (MLRA 9:1)

1.Institut elementeorganicheskikh soedineniy Akademii nauk  
SSSR. (Phosphinic acid)

ANISIMOV, K.N.; KOLOBOVA, N.Ye; NESMEYANOV, A.N.

Investigation into the unsaturated phosphinic acids. Part 12.  
The tetraalkyldiamides of the  $\beta$ -alkoxyethoxyvinylphosphinic  
acids. Izv.AN SSSR.Otd.khim.nauk no.5:834-837 S-O '55.

(MIRA 9:1)

1.Institut elementoorganicheskikh soedineniy Akademii nauk  
(Phosphinic acid) (Amides) SSSR.

[illegible]

[illegible]

KOLOBOVA, N. Ye.

USSR/ Chemistry - Analytical chemistry

Card 1/1 Pub. 40 - 6/25

Authors : Anisimov, K. N.; Kolobova, N. Ye.; and Nesmeyanov, A. N.

Title : Study of unsaturated phosphinic acid derivatives. Part 18. Alkylthiovinylphosphinic acid chlorides and their derivatives

Periodical : Izv. AN SSSR. Otd. khim. nauk 1, 23-26, Jan 1956

Abstract : The synthesis of acid chlorides of ethylthiovinylphosphinic, n-butylthiovinyl phosphinic, n-propyl, n-butyl, allyl, n-hexyl, beta-methoxyethyl, beta-ethoxyethyl esters of ethylthiovinylphosphinic acid, n-butyl, allyl and n-hexyl esters of n-butylthiovinylphosphinic acid as well as dipiperidide of ethylthiovinylphosphinic acid is described. The chem. formulas of the derivatives and their physico-chemical properties are given in tables. Three references: 1 USSR, 1 Pol. and 1 Germ. (1896-1954). Tables.

Institution : Acad. of Sc., USSR, Inst. of Elementoorganic Compounds

Submitted : October 14, 1954

ANISIMOV, K.N.: KOLOBOVA, N.Ye.

Research in the field of unsaturated phosphinic acids. Part 19.

Esters of (3-chlorobutene-2)-4-phosphinic and (butadiene-2,3)-

-4-phosphinic acids. Izv.AN SSSR. Otd.khim.nauk no.8:923-926

Ag '56.

(MLBA 9:10)

1. Institut elementoorganicheskikh soedineniy Akademii nauk SSSR.  
(Phosphinic acid)